

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 11 July 2000 (11.07.00)	
International application No. PCT/US99/25253	Applicant's or agent's file reference RCA89210
International filing date (day/month/year) 03 November 1999 (03.11.99)	Priority date (day/month/year) 03 November 1998 (03.11.98)
Applicant DINWIDDIE, Aaron, Hal et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

02 June 2000 (02.06.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Pascal Piriou
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

TRIPOLI, Joseph, S.
Thomson Multimedia Licensing
Incorporated
P.O. Box 5312
Princeton, NJ 08543
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 11 July 2000 (11.07.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference RCA89210	
International application No. PCT/US99/25253	International filing date (day/month/year) 03 November 1999 (03.11.99)

1. The following indications appeared on record concerning: <input checked="" type="checkbox"/> the applicant <input type="checkbox"/> the inventor <input type="checkbox"/> the agent <input type="checkbox"/> the common representative		
Name and Address THOMSON CONSUMER ELECTRONICS, INC. 10330 North Meridian Street Indianapolis, IN 46290-1024 United States of America	State of Nationality US	State of Residence US
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: <input checked="" type="checkbox"/> the person <input checked="" type="checkbox"/> the name <input checked="" type="checkbox"/> the address <input checked="" type="checkbox"/> the nationality <input checked="" type="checkbox"/> the residence		
Name and Address THOMSON LICENSING S.A. 46, quai Alphonse Le Gallo F-92648 Boulogne Cedex France	State of Nationality FR	State of Residence FR
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to: <input checked="" type="checkbox"/> the receiving Office <input checked="" type="checkbox"/> the designated Offices concerned <input checked="" type="checkbox"/> the International Searching Authority <input checked="" type="checkbox"/> the elected Offices concerned <input checked="" type="checkbox"/> the International Preliminary Examining Authority <input type="checkbox"/> other:		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Pascal Piriou Telephone No.: (41-22) 338.83.38
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PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference RCA 89210	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 99/ 25253	International filing date (day/month/year) 03/11/1999	(Earliest) Priority Date (day/month/year) 03/11/1998
Applicant THOMSON CONSUMER ELECTRONICS, INC. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No.

P 99/25253

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F9/445 G06K7/00 H04N7/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F G06K H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 296 13 548 U (ELME ELEKTRONISCHE MESGERAETE) 19 September 1996 (1996-09-19) page 4, line 36 -page 6, line 10 -----	1,5-8
A	US 5 537 292 A (BOWEN DONALD H) 16 July 1996 (1996-07-16) abstract; figures 5-8A column 1, line 1 -column 2, line 64 -----	1,5,11, 12,15

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

11 April 2000

Date of mailing of the international search report

19/04/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Kingma, Y

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/25253

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29613548 U	19-09-1996	NONE	
US 5537292 A	16-07-1996	US 5367571 A US 5592551 A	22-11-1994 07-01-1997

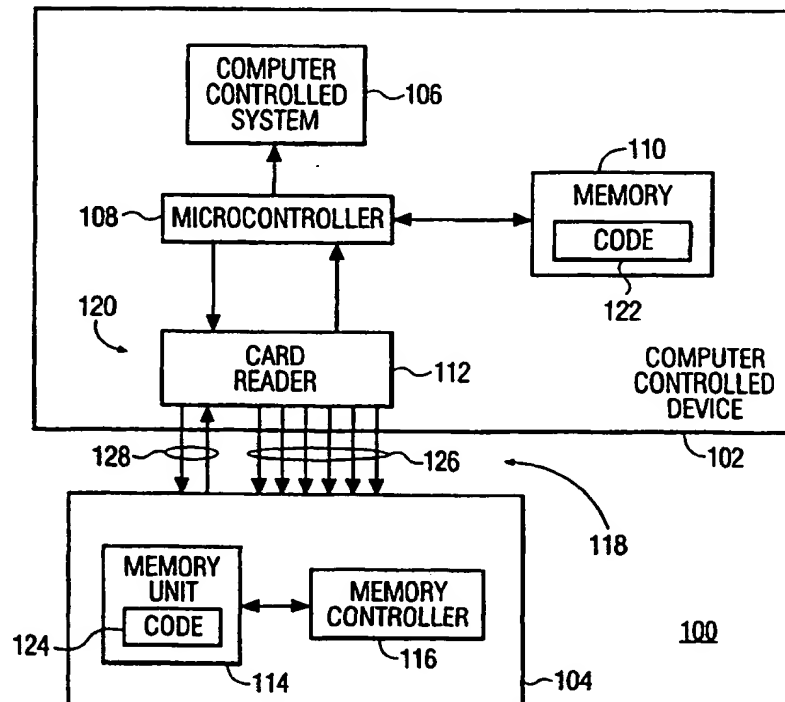
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06F 9/00		A2	(11) International Publication Number: WO 00/26767
			(43) International Publication Date: 11 May 2000 (11.05.00)
(21) International Application Number: PCT/US99/25253 (22) International Filing Date: 3 November 1999 (03.11.99) (30) Priority Data: 60/106,809 3 November 1998 (03.11.98) US (71) Applicant (for all designated States except US): THOMSON CONSUMER ELECTRONICS, INC. [US/US]; 10330 North Meridian Street, Indianapolis, IN 46290-1024 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DINWIDDIE, Aaron, Hal [US/US]; 12466 Trophy Drive, Fishers, IN 46038-3029 (US). NORTRUP, Kevin, Eugene [US/US]; 7477 N. London Road, Fairland, IN 46126 (US). LIU, Derek [CN/US]; 11710 Forest Park Lane, Carmel, IN 46033 (US). VAYL, Yefim [US/US]; 14360 Whitworth Drive, Carmel, IN 46033 (US). (74) Agents: TRIPOLI, Joseph, S. et al.; Thomson Multimedia Licensing Incorporated, P.O. Box 5312, Princeton, NJ 08543 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published Without international search report and to be republished upon receipt of that report.	

(54) Title: METHOD AND APPARATUS FOR UPDATING COMPUTER CODE USING AN INTEGRATED CIRCUIT INTERFACE

(57) Abstract

A method and apparatus for providing computer code updates through an integrated circuit card (smart card) interface. The smart card interface within a computer control device determines whether the card that is inserted into the smart card interface is either a memory card or a conventional smart card. Once the smart card interface has detected that the memory card has been inserted, the interface requests data from the card. The interface provides the computer code to the memory of the computer controlled device to update the computer code therein.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
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DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

What is claimed is:

1. An apparatus for updating computer code comprising:
a card interface capable of distinguishing between a conventional
5 integrated circuit card and a memory card;
a memory card comprising a memory unit and a memory unit controller;
and
a computer controlled device memory unit for storing a first computer
code that is downloaded from the memory unit of the memory card.
10
2. The apparatus of claim 1 wherein a second computer code stored in the
memory unit is updated by the first computer code stored in the memory unit of
the memory card.
- 15 3. The apparatus of claim 1 wherein said memory card comprises at least one
high speed data port.
4. The apparatus of claim 3 wherein the at least one high speed data port is
used to transmit the first computer code from the memory card memory unit to
20 the computer controlled device memory unit.
5. A computer controlled device comprising:
a microcontroller;
a memory for storing computer code;
25 an integrated circuit card reader capable of differentiating between
conventional integrated circuit cards and memory cards.
6. The computer controlled device of claim 5 wherein said integrated circuit card
reader further comprises:
30 means for producing a first signal that is coupled to an integrated circuit card
interface connection;

means for analyzing a second signal that is produced by a memory card in response said first signal.

7. The computer controlled device of claim 6 wherein said second signal is not produced by integrated circuit cards that are not memory cards.

5

8. The computer controlled device of claim 6 wherein said integrated circuit card reader applies said first signal to a clock signal connector of said integrated circuit card interface connection and receives said second signal on a data input/output signal connector of said integrated circuit card interface connection.

10

9. The computer controlled device of claim 5 wherein said integrated circuit card reader further comprises at least one high speed data path through said integrated circuit card interface connection.

15

10. The computer controlled device of claim 5 wherein said integrated circuit card reader further comprises:

means for transferring computer code from said memory card to said memory.

20

11. The computer controlled device of claim 5 wherein said integrated circuit card reader further comprises:

means for accepting or rejecting the computer code for transference from said memory card to said memory.

25

12. A method of updating computer code in a computer controlled device comprising the steps of:

identifying whether an integrated circuit card is a memory card or a conventional integrated circuit card; and

transferring the computer code through a high speed data port of a memory card into said computer controlled device.

30

13. The method of claim 12 wherein said identifying step further comprises the steps of:

applying a first signal to said memory card;

analyzing a second signal produced by said memory card in response to said
5 first signal to determine if said integrated circuit card is a memory card.

14. The method of claim 13 wherein said transferring step further comprises:
activating an NRSS interface.

10 15. The method of claim 12 further comprises:

analyzing a header of said computer code to determine the validity of the
computer code.

09/830 35

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
11 May 2000 (11.05.2000)

PCT

(10) International Publication Number
WO 00/26767 A3(51) International Patent Classification⁷: **G06F 9/445,**
G06K 7/00, H04N 7/16

(21) International Application Number: PCT/US99/25253

(22) International Filing Date:
3 November 1999 (03.11.1999)

(25) Filing Language: English

(26) Publication Language: English

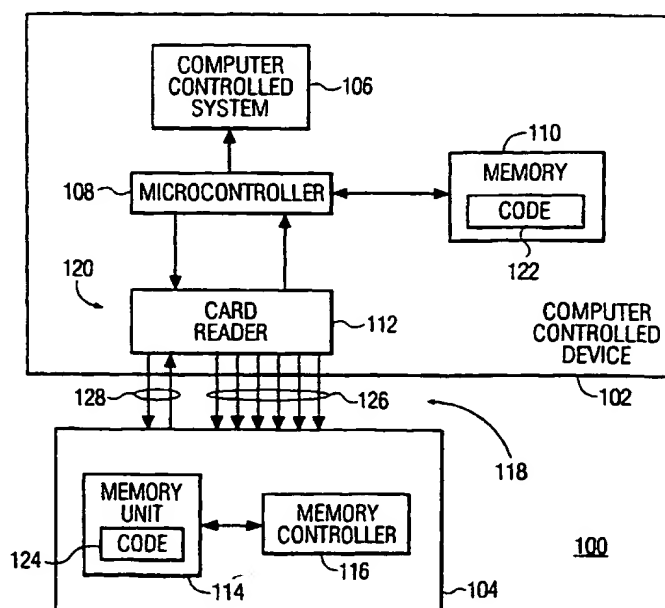
(30) Priority Data:
60/106,809 3 November 1998 (03.11.1998) US(71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, quai Alphonse Le Gallo, F-92648 Boulogne Cedex (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DINWIDDIE, Aaron, Hal** [US/US]; 12466 Trophy Drive, Fishers, IN 46038-3029 (US). **NORTRUP, Kevin, Eugene** [US/US];7477 N. London Road, Fairland, IN 46126 (US). **LIU, Derek** [CN/US]; 11710 Forest Park Lane, Carmel, IN 46033 (US). **VAYL, Yefim** [US/US]; 14360 Whitworth Drive, Carmel, IN 46033 (US).(74) Agents: **TRIPOLI, Joseph, S. et al.**; Thomson Multimedia Licensing Incorporated, P.O. Box 5312, Princeton, NJ 08543 (US).(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR UPDATING COMPUTER CODE USING AN INTEGRATED CIRCUIT INTERFACE



(57) Abstract: A method and apparatus for providing computer code updates through an integrated circuit card (smart card) interface. The smart card interface within a computer control device determines whether the card that is inserted into the smart card interface is either a memory card or a conventional smart card. Once the smart card interface has detected that the memory card has been inserted, the interface requests data from the card. The interface provides the computer code to the memory of the computer controlled device to update the computer code therein.

WO 00/26767 A3

WO 00/26767 A3



Published:

— with international search report

(88) Date of publication of the international search report:
13 December 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/25253

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F9/445 G06K7/00 H04N7/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F G06K H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 296 13 548 U (ELME ELEKTRONISCHE MESGERAETE) 19 September 1996 (1996-09-19) page 4, line 36 -page 6, line 10	1,5-8
A	US 5 537 292 A (BOWEN DONALD H) 16 July 1996 (1996-07-16) abstract; figures 5-8A column 1, line 1 -column 2, line 64	1,5,11, 12,15



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

11 April 2000

Date of mailing of the international search report

19/04/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Kingma, Y

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/25253

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 29613548	U	19-09-1996	NONE	
US 5537292	A	16-07-1996	US 5367571 A	22-11-1994
			US 5592551 A	07-01-1997

PATENT COOPERATION TREATY

From the **EXPRESS** **EL6824420746S**
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

FEB 26 2001

PCT

To:

TRIPOLI, Joseph S.
THOMSON MULTIMEDIA LICENSING INC.
P.O. Box 5312
Princeton, New Jersey 08543
ETATS-UNIS D'AMERIQUE

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

Date of mailing
(day/month/year) 16.02.2001

Applicant's or agent's file reference
RCA 89210

IMPORTANT NOTIFICATION

International application No.
PCT/US99/25253

International filing date (day/month/year)
03/11/1999

Priority date (day/month/year)
03/11/1998

Applicant
THOMSON LICENSING S.A. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer

Schall, H

Tel. +49 89 2399-2647



PCT

RECD 20 FEB 2001

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference RCA 89210	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/25253	International filing date (day/month/year) 03/11/1999	Priority date (day/month/year) 03/11/1998
International Patent Classification (IPC) or national classification and IPC G06F9/00		
Applicant THOMSON LICENSING S.A. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 02/06/2000	Date of completion of this report 16.02.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Wiedmeyer, V Telephone No. +49 89 2399 2273 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/25253

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:

Description, pages:

1-6 as originally filed

Claims, No.:

1-18 as received on 27/12/2000 with letter of 21/12/2000

Drawings, sheets:

1/2,2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

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☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-18
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-18
Industrial applicability (IA)	Yes:	Claims	1-18
	No:	Claims	

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

The following document has been considered for the purposes of this report:

D1: DE 296 13 548 U (ELME ELEKTRONISCHE MESSGERAETE)

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Document D1 discloses an apparatus / a method for loading data in a computer controlled device, wherein
 - an integrated circuit card and a memory card are differentiated; and
 - data is transferred through a high speed data port from the memory card into the computer controlled device.

The subject-matter of independent Claims 1, 11 and 18 differs from the aforementioned prior art in that the transferred data is computer code. This feature, however, is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed. Furthermore, it is well-known in the art to use computer code to program a computer controlled device.

Therefore, insofar as the present text can be understood (see Item VIII), the subject-matter of Claims 1, 11 and 18 lacks an inventive step and thus does not satisfy Article 33(3) PCT.

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2. Dependent Claims 2 - 10 and 12 - 17 do not seem to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

In particular, the following further features are known from document D1:

- a first signal is applied to the memory card via a clock signal connector, in response to a reset signal, and, in response to the first signal, a second signal is received from the memory card via a data input/output signal connector; and
- the validity of the initially transferred data is determined.

Re Item VII

Certain defects in the international application

The document D1 has not been identified in the description nor has the relevant background art disclosed therein been discussed. The requirements of Rule 5.1(a)(ii) PCT are, thus, not fulfilled.

Re Item VIII

Certain observations on the international application

The various definitions of the invention given in independent Claims 1, 11 and 18 are such that the claims as a whole are not clear and concise, contrary to Article 6 PCT. In the present case it would have been appropriate to define the invention in

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one independent apparatus claim and in a corresponding independent method claim.

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CLAIMS

1. An apparatus (100) for loading computer code comprising:
a card interface (120) capable of distinguishing between a conventional integrated circuit
5 card and a memory card (104);
a memory card (104) comprising a memory unit (114) and a memory unit controller
(116); and
a computer controlled device memory unit (110) for storing a first computer code (124)
that is downloaded from the memory unit (114) of the memory card (104).
- 10 2. The apparatus of claim 1 wherein a second computer code (122) stored in the computer
controlled device memory unit is updated by the first computer code (124) stored in the memory
unit (114) of the memory card (104).
3. The apparatus of claim 1 wherein said memory card (104) comprises at least one high
speed data port (128).
- 15 4. The apparatus of claim 3 wherein the at least one high speed data port (128) is used to
transmit the first computer code (124) from the memory card memory unit (114) to the computer
controlled device memory unit (110).
5. The apparatus of claim 1 wherein said card interface comprises:
means for producing a first signal (208) that is coupled to an integrated circuit card
20 connection (118); and
means for analyzing a second signal that is produced by a memory card in response to
said first signal (210).

6. The apparatus of claim 5 wherein said second signal is not produced by integrated circuit cards that are not memory cards.
- 5 7. The apparatus of claim 5 wherein said card interface (120) applies said first signal to a clock signal connector of said integrated circuit card connection (118) and receives said second signal on a data input/output signal connector of said integrated circuit card connection (118).
8. The apparatus of claim 1 wherein said card interface (120) further comprises at least one high speed data path (128) with said memory card (104).
- 10 9. The apparatus of claim 1 wherein said card interface (120) further comprises :
means for transferring computer code from said memory card to said computer controlled device memory unit (108).
10. The apparatus of claim 1 wherein said card interface (120) further comprises:
means for accepting or rejecting the computer code for transference from said memory
15 card to said computer controlled device memory unit (218).
11. A method of loading computer code in a computer controlled device comprising the steps of:
identifying whether an integrated circuit card is a memory card or a conventional
integrated circuit card (212); and,
20 transferring the computer code through a high speed data port of a memory card into said computer controlled device (222).
12. The method of claim 11 wherein said identifying step further comprises the steps of:
applying a first signal to said memory card (208); and
analyzing a second signal produced by said memory card in response to said first signal
25 to determine if said integrated circuit card is a memory card (210).
13. The method of claim 12 wherein said transferring step further comprises:
activating an NRSS interface (216).

14. The method of claim 11 further comprises:

analyzing a header of said computer code to determine the validity of the computer code

(218).

5 15. The method of claim 11, further comprising toggling a reset signal.

16. The method of claim 15, further comprising said memory card monitoring a clock input terminal for said first signal in response to said toggled reset signal.

17. The method of claim 16, wherein said memory card generates said second signal in response to detection of said first signal.

10 18. An apparatus (100) for updating computer code for controlling a computer controlled device, said apparatus comprising:

a card interface (120) capable of distinguishing between a conventional integrated circuit card and a memory card (104);

a memory card (104) comprising a memory unit (114) and a memory unit controller

15 (116); and

a computer controlled device memory unit (110) for storing a first computer code (124) that is downloaded from the memory unit (114) of the memory card (104);

wherein said computer controlled device is programmed by said first computer code (124) that is downloaded from the memory unit (114) of the memory card (104).